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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/579,273 | 05/26/2000 | Shoji Arikuma | 000672 | 7798 |

23850 7590 06/09/2003

ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
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WASHINGTON, DC 20006

EXAMINER

LAO, LUN S

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| ART UNIT | PAPER NUMBER |
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2643

DATE MAILED: 06/09/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

2

Office Action Summary

Application No.

09/579,273

Applicant(s)

ARIKUMA ET AL.

Examiner

Lun-See Lao

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Introduction

1. Claims 1-4 of U.S. application 09/579,273 filed on 05/26/2000 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto (US PAT 5,621,659) in view of Fukuda (JP 10-233056)

Consider claim 1 Matsumoto teach an audio component system comprising a plurality of components (see fig.1b, (11,21)) for outputting audio signals, and a signal processing control unit (see fig.1a, 1) connected to the components (see fig.1b,(11,21)), the signal processing control unit (1) comprising a plurality of signal input terminals (Pa, Pb and Pc) for receiving audio signals from the components, selector means (4) connected to the signal input terminals for selecting the audio signal received by desired one of the signal input terminals, a signal processing circuit for processing the selected signal as required by an operation including amplification and outputting the resulting audio signal, and a control circuit for changing over the selector means (4) in

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accordance with a manipulation by the user (see col.23 line 5-col.24 line 15), the audio component system being characterized in that:

the control circuit of the signal processing control unit (fig.1a,1) and a control circuit (fig.1b, (12,22)) of each of the components (11,21) are connected to each other for communication, the control circuit of the signal processing control unit comprising signal transmitting means (see col.2 line50-col.4 line 20) for transmitting at a suitable time a call signal to the control circuit of at least one of the components which is to be checked for connection or no connection, means (see col.17 line 35 –col.18 line 60) for checking whether an answer signal is received in response to the call signal (first control signal), and the selector means (see fig.1a (4)) is from the component not responding with the answer signal, the control circuit of each component comprising signal response means for sending the answer signal to the signal processing control unit in response to the call signal from the control circuit of the signal processing control unit (see col.2 line 50-col.4 line 20). Matsumoto does not teach muting means for reducing substantially to zero the sound volume of the audio signal to be output from the signal processing circuit when the audio signal selected by the selector means is from the component not responding with the answer signal.

However, Fukuda teaches that muting means (see fig.1, (3)) for reducing substantially to zero the sound volume inherently of the audio signal to be output from the signal processing circuit when the audio signal selected by the selector means (9) is from the component not responding with the answer signal (see page 3 of 4).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Matsumoto into the teaching of Fukuda to provide a mute circuit for saving energy in the system.

Consider claims 2-4 mastumoto teaches an audio component system of the signal transmitting means (see fig.1b, 1) of the control circuit of the signal processing control unit (1) transmits the call signal to the control circuits of all the components (see fig.1b, (11,21)) when the signal processing control unit is energized (see col.2 line 50-col.4 line20); and one of the signal input terminals (Pa, Pb and Pc) is selected by the selector means (4), the signal transmitting means (see fig.1a, (1)) of the control circuit of the signal processing control unit transmits the call signal to the control circuit of the component connected to the selected signal input terminal (see col.5 line 65- col.6 line 65); and the signal transmitting means (see fig.1a, (1)) of the control circuit of the signal processing control unit transmits the call signal to the control circuits of all the components in a predetermined cycle (see col.15 line 25-col.16 line 65).

Conclusion

4. The prior art made of record and not relied upon is considered to applicant's disclosure. Washikawa (US PAT. 6,492,909) is recited to show other related the method and apparatus for processing interaural time delay in 3d digital audio.

5. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:(703) 872-9314

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington.

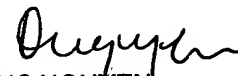
VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (703) 305-2259. The examiner can normally be reached on Monday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (703) 306-0377.

Lao, Lun-See
Patent Examiner
US Patent and Trademark Office
Crystal Park 2
(703305-2259)


DUC NGUYEN
PRIMARY EXAMINER